

THE TEXTILE INDUSTRY IN VIRGINIA
An Analytical and Reflective View

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INTRODUCTION

The textile industry has been a vital part of Virginia's economy in the 20th century, particularly in a number of towns and communities in Southside Virginia. As we approach the end of this century, two major forces, technological advances and foreign trade, are shaping the global economy and affecting every industry in the economy. This article reviews the importance of the textile industry to the Virginia economy and examines the industry's historical employment trends and the effects of increased globalization and new technology.

DESCRIPTION OF THE TEXTILE INDUSTRY

The textile industry produces yarn, thread, and, most notably, fabric. Textile firms weave fabric into everything from automobile cloth to washcloths. Firms in the textile industry also produce carpeting, hosiery, and knit outerwear such as sweaters and mittens.

Virginia's textile employment is concentrated in the knitting mills sector. The firms in this sector (SIC 225) are primarily involved in the manufacture of hosiery, knit outerwear from yarn, or outerwear from knit fabrics produced in-house. Employment in this sector was 11,874 in the first quarter of 1998, accounting for 35 percent of textile employment. The cotton broadwoven fabric mills sector (SIC 221) is the second largest, employing 6,367 or 19 percent of textile employment. The third largest sector is the broadwoven fabric mills, manmade fiber and silk (SIC 222); employment in this sector was 3,626 in the first quarter of 1998 and represented 11 percent of textile employment. Combining all broadwoven fabric mills sectors (SICs 221, 222, and 223), employment totaled 12,287 and accounted for 36 percent of textile employment, surpassing employment in the knitting mills sector.

As a result of new technology and increased globalization during the past few decades, the textile industry is concentrated, automated, and efficient, particularly when compared to the apparel industry. Although the industries are closely linked, their operations are very different. The textile industry manufactures the base fabrics the apparel industry uses to produce clothing and other finished goods that are eventually sold on the retail market.

The textile industry is highly automated and less labor intensive than the apparel industry. Technology is more easily applied to the textile industry due to the large scale and uniformity of much of the textile production process. Investment spending on technology by textile manufacturers has accelerated the production process, increased productivity, and reduced the need for labor, whereas, the apparel industry is still very labor intensive despite new technologies.

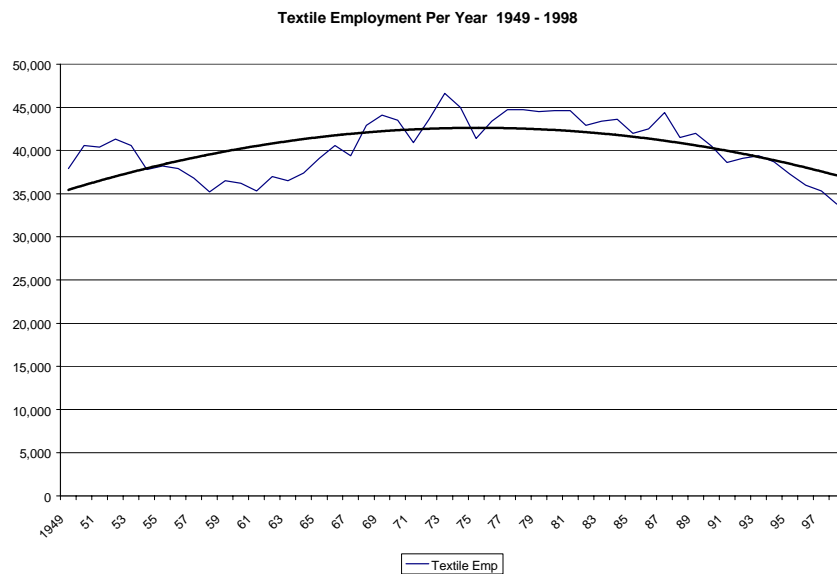
The new technologies available to textile manufacturers are expensive and have led to a concentration of ownership in the textile industry. To stay competitive, firms needed to raise funds to automate. As a result, corporate mergers and acquisitions occurred, increasing the concentration of ownership in the textile industry.

Textile workers have been more effected by technological changes and been less effected by increasing imports than apparel workers. High automation, with labor constituting a relatively small share of total production costs, has kept textile manufacturers competitive with foreign producers. While the textile industry does not suffer as greatly from import competition as the apparel industry does, it is affected indirectly as less domestic apparel production results in fewer domestic textile workers needed.

IMPORTANCE OF THE TEXTILE INDUSTRY

The textile industry has been a vital part of Virginia's economy in the 20th century. In a large part of Virginia's rural areas the textile industry is the foundation of local economies; a few towns and all cities actually exist because of textile jobs. As a testament to its significance, the textile industry was the largest manufacturing employer in Virginia for 31 of the 38 years between 1949 and 1987, the last year of textile manufacturing employment dominance.¹

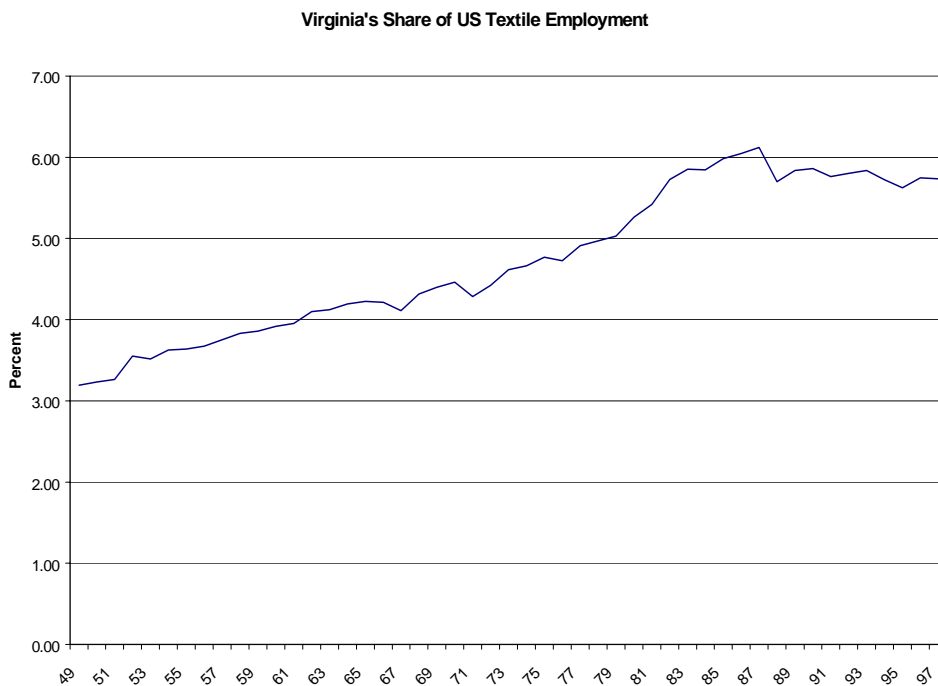
However, in spite of its continued dominance in some substate areas, textile's importance statewide has declined over the past 50 years. (See Figure 1.) In 1949, textile employment



accounted for 17 percent of total manufacturing employment, and slightly more in 1950, as Virginia contributed to the Korean War effort. Thereafter, a downward trend developed and continues still. In 1973, at its peak historical employment level of 46,600 textile employment accounted for 11.6 percent of total manufacturing employment. At 35,300, textile employment in 1997 represented 8.7 percent of total manufacturing in Virginia, and ranked fourth in industry employment in the state².

With a nationwide ratio of textile employment to total manufacturing employment of 3.3 percent, Virginia's ratio of 8.7 percent clearly shows it's significant role as a provider of textile goods. In reviewing the major textile producing states, Virginia's employment level is near average and ranks as the nation's fifth largest employer of textile workers³.

From 1949 to 1987, Virginia enjoyed an increasing share of national textile employment. At 3.1 percent in 1949, the portion grew steadily until nearly doubling by 1987 where it peaked at 6.1 percent and ranked fourth in national share. (See Figure 2.) After 1987, Virginia's share fell and has since stabilized at around the current level of 5.7 percent ranking it fifth in national share.



Even as textile employment in Virginia was growing in the late 1950's through early 1970's and its national share was increasing, textile wages as a percent of total manufacturing wages were falling. In 1950, the average textile wage was 4.2 percent higher than the average total manufacturing wage; by 1953 it had fallen to 4.3 below the average total manufacturing

wage. This gap between the average textile and manufacturing wage that began in the early 1950's remained relatively constant until it widened in 1980 and by 1988 had soared to 25.6 percent. Since then, the difference has narrowed slightly and currently stands at approximately 21.3 percent.

The 1997 hourly wage in the textile industry was \$9.84; the weekly wages were \$410.33. The average hourly wage for total manufacturing was \$12.51, with weekly wages at \$527.92. Following other downward trends, in 1997 only two other manufacturing industries paid lower wages than textiles, four industries paid lower wages in 1970, and in 1950 at least five industries paid lower wages. It must be noted however that these statistics are calculated on a statewide basis. While the average hourly and weekly wages for textiles may be relatively low, especially where high-tech and heavy industries are located, the wages may be equitable in those areas where textiles is the predominate employer and prices for goods are driven by the ability to pay.

LOCATION OF TEXTILE MANUFACTURING

Textile manufacturing occurs in 56 of Virginia's 135 cities and counties. However, textile manufacturing is primarily concentrated in Southern Virginia, adjacent to the North Carolina border. (See Map 1.) The larger facilities are also located in this region. (See Map 2.) While there are approximately 97 textile firms in Virginia with a total of 133 locations, employment is concentrated among a few firms. Burlington Industries, Bassett Walker, and Dan River are the largest three firms and together account for almost 40 percent of textile employment.

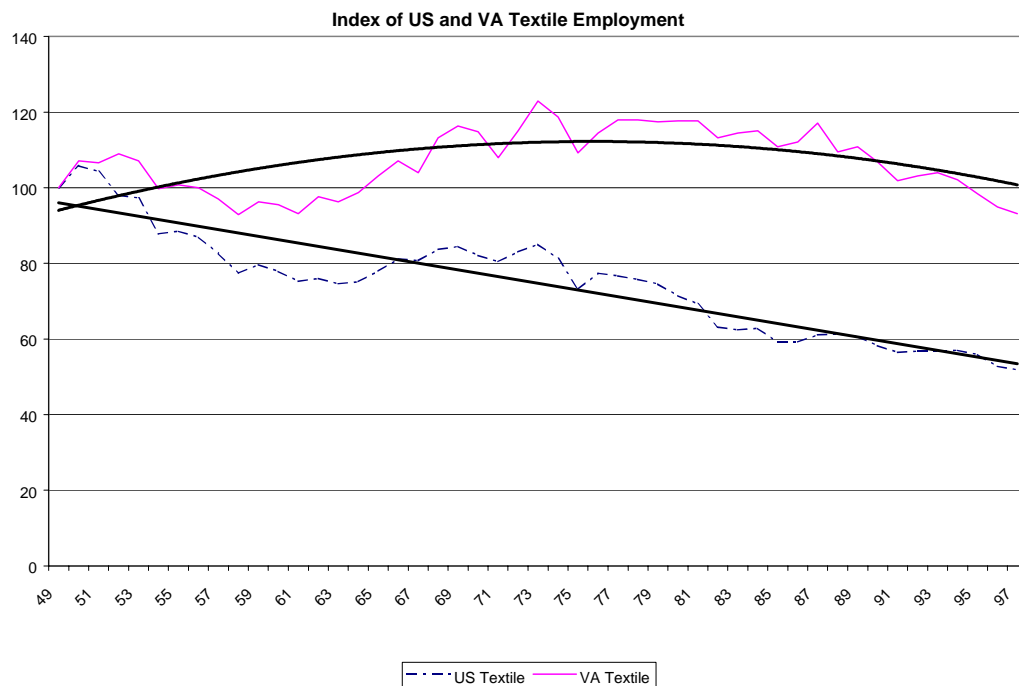
Textile employment is heavily concentrated in the Henry County, Danville, Martinsville, and Pittsylvania County area. These counties and cities rank in the top five areas in textile employment, comprising 41 percent of the state's total. Almost half of the textile employment in this area is in the knitting mill sector, primarily knit outerwear. The next largest sector is the cotton broadwoven fabric mills, accounting for over a third of textile employment. Dan River, Bassett Walker, Tultex, Burlington Industries, and Fieldcrest Cannon are the largest employers in the area.

Mecklenburg County ranks fourth in textile employment, exceeding Pittsylvania County. Burlington Industries is the largest employer in the area, accounting for almost 75 percent of textile employment. Over two-thirds of their workers are involved in the production of wool broad woven fabrics, while the rest are involved in the manufacture of miscellaneous textile products.

Historical Employment Trends

Employment in Virginia's textile industry is declining and has fallen by 28 percent since the all-time high of 46,600 in 1973. However, a look at the entire data series reveals a drop of 11 percent since 1949. These different rates of decline are indicative of the textile industry in Virginia. Following a growth period in the late 1940's and early 1950's, employment began a decennial contraction period followed by a last period of growth that peaked in 1973. Since the late 1970's, four industries have lost a larger portion of their respective employment; yet none, with the exception of the apparel industry, has consistently placed a larger unemployment burden on local economies due to the clustering of firms and the transitory nature of the textile industry.⁴

While Virginia's textile industry employment trended up prior to its peak in 1973, national textile employment has trended down since its peak in 1950. Since 1973, textile employment in both Virginia and the nation has trended down, however the rate of decline for Virginia was about half that of the nation. Over the 1949 to 1997 period, U.S. textile employment declined 48 percent, compared to an 11 percent decline in Virginia. (See Figure 3.)



TRADE

Increased globalization and technological advances are primary reasons for textile employment losses. In the past fifty years, technological, social, and political changes have taken place, which in the final analysis has opened new markets and allowed for the exchange of ideas. Countries that once closed their borders to the outside world have loosened, or in some cases eradicated impeding obstacles to commerce. New technologies that have advanced

communications and transportation have facilitated the ease in which countries can trade. And most importantly and fundamentally, world population has grown over the past fifty years increasing the demand for goods, such as textiles, and supplying a large labor source for emerging countries. Increased globalization along with associated rising imports has affected employment in the textile industry.

The U.S. worldwide textile trade deficit was \$3.9 billion in 1997, \$341 million less than in 1996. Less developed countries such as China, Mexico, and Taiwan are among the top five exporters of textile goods to the U.S. In 1997, U.S. negative trade balances (billions of dollars) in textiles existed with China, -\$2; Europe, -\$9; Taiwan, -\$7; South Korea, -\$6, Asia, -\$5; and Japan, -\$2.

Growth in textile imports has continued despite the Multifiber Arrangement (MFA). The MFA was developed in 1974 to provide protection for American mills was unable to ward off the pressures of low cost labor from developing countries. The situation was greatly exacerbated by increased apparel imports, since the US textile industry has supplied the bulk of production inputs to the apparel industry. The expiration of the MFA on December 31, 1994 commenced a 10-year transition period in which quotas of the MFA will be eliminated and tariffs will be reduced.

The global trading environment is becoming even more open. The North American Free Trade Agreement (NAFTA) that was established between the U.S., Mexico, and Canada and implemented in 1994, has been responsible for job loss as companies have moved operations to Mexico in order to capitalize on the lower cost of labor. Conversely, jobs have been saved by increased exports of textile goods to Canada. Hence, the net effect of NAFTA at the present is unsettled.

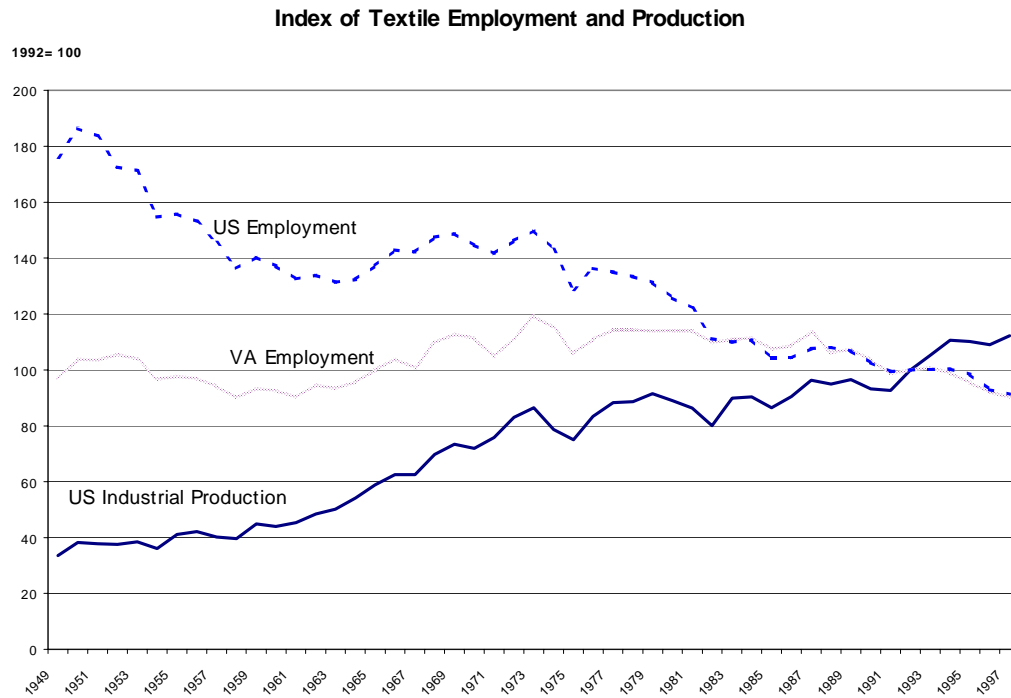
Several textile companies have been impacted by imports of textile goods or production shifts to Canada or Mexico. Data collected by the Virginia Employment Commission (VEC) for the period 1991-1996 reveals that employees from 10 of the 20 firms, whose employees petitioned for assistance provided for by the Trade Act of 1974, were found to have lost their jobs from imports that contributed importantly to their separation.⁵ Since the induction of NAFTA in 1994, only the employees of 1 out of 2 firms, whose employees petitioned for transitional adjustment assistance under NAFTA, were eligible to apply. This data offers little inference about the impact from NAFTA due to the ability of employees to petition under the Trade Act or NAFTA for monetary assistance.⁶

Virginia's textile exports increased a dramatic 79.8 percent from 1993 to 1997. In 1993, Virginia had exported \$65.9 million in textiles to the world; by the end of 1997, exports were valued at \$118.5 million. Virginia ranked second in growth in the value of textiles in 1997 and fifth in value of textile exports over the 1993-1997 period. In 1997, the textile industry was Virginia's tenth largest exporter.

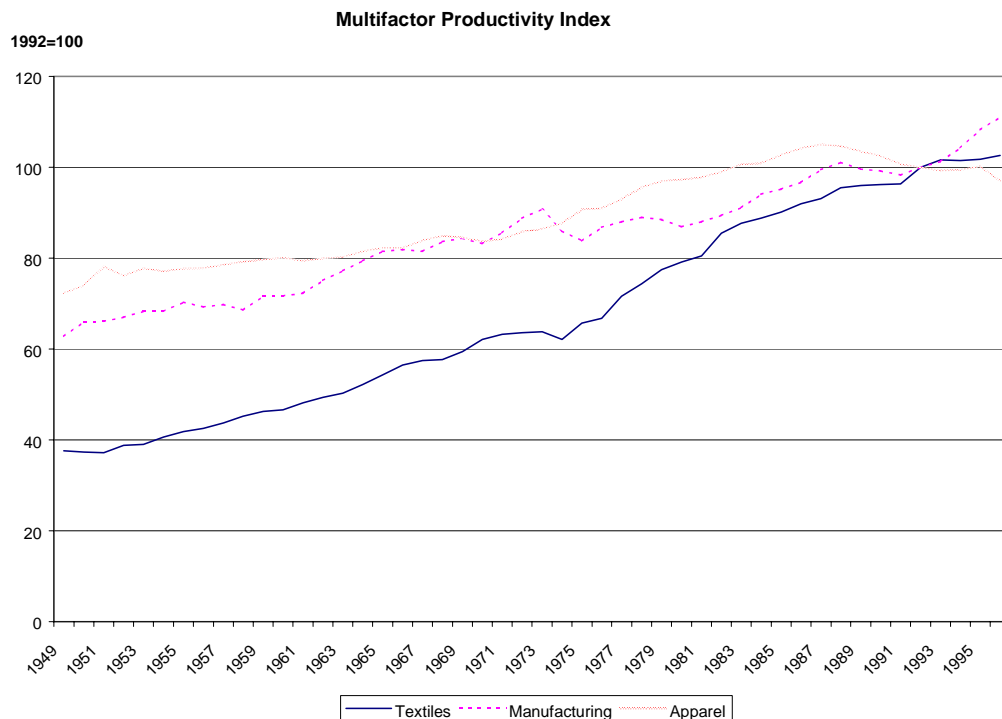
PRODUCTIVITY

Productivity growth in the textile industry has also contributed to textile job losses. To stay competitive, textile manufacturers have invested in technology and through this investment have increased productivity. The ability to produce more at a lower cost was achieved through automation and restructuring the production processes and has reduced the need for labor. Open-end spinning, shuttleless looms, and the application of computers and lasers are a few examples of technological advancements that improved the textile production process, boosting productivity.

U.S. textile production has trended up, despite the downward trend in U. S. textile employment. In Virginia, textile employment has been trending downward since its peak in 1973. (See Figure 4.) Productivity in the textile industry, as captured by the multifactor productivity index for



textiles, has increased steadily since 1949, the earliest available data. Textile productivity has increased at an average annual rate of 2.2 percent during this time period, surpassing productivity growth in manufacturing (1.2 percent) and apparel (0.6 percent). (See Figure 5.) Though just recently, textile productivity growth has been relatively flat, whereas, manufacturing productivity has increased. Productivity growth in the apparel industry continued to remain flat or decline slightly.



Multifactor productivity shows the relationship of output to a combination of inputs used in the production of that output, such as labor, capital, and intermediate purchases. Since 1949, the labor and capital components of the textile multifactor productivity index have trended upward. Average annual growth was 3.9 percent for labor productivity, exceeding capital's productivity growth of 2.0 percent.

SUMMARY

The data consistently reveals the diminishing contribution to the state economy by the textile industry that has been brought on by growing imports, changing technologies, and diversification into other industries. The "global economy" is not a new concept to textile industry; in fact it has been reshaping itself since the early seventies in response to growing pressures from competing nations.

The textile industry has been labeled a “dying industry”; we strongly disagree with this description. What is vanishing are those sectors of the industry that cannot compete with foreign labor from developing countries. Virginia has a long history in the production of textiles; consequently, a vast knowledge base and an experienced labor force have been firmly incorporated. With this knowledge and labor, Virginia’s textile industry will continue to evolve and diversify, becoming more efficient and producing textiles of high value. This in-turn will perpetuate a higher standard of living, especially for the population in areas where the textile industry is the major employer.

¹ From 1987 through 1993, Transportation Equipment, SIC 37, was the largest manufacturing industry. Since then, Food and Kindred Products, SIC 20, has been the predominant manufacturing employer in Virginia.

² In 1997, Food and Kindred Products with an employment level of 40,000 was the largest manufacturing employer, followed by Transportation Equipment at 37,800 and Printing and Publishing, SIC 27, at 37,500.

³ The states preceding Virginia are Alabama, 39,900; South Carolina, 79,100; Georgia, 107,300; and North Carolina, 177,000.

⁴ Leather, 100%; Apparel, 51.5%; Chemicals, 47.1%; and Tobacco, 36.8%.

⁵ It is the responsibility of the employees to petition for assistance through the Trade Act or NAFTA.

⁶ Under the Trade Act of 1974, employees may receive assistance if foreign imports “contributed importantly” to job separation. Under NAFTA provisions, employees are eligible for assistance if imports from Canada or Mexico “contributed importantly” to job separation, and or a shift in production operation to Canada or Mexico.